



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,710	08/31/2001	Il Gun Kwon	0465-0854P	8869
2292	7590	04/20/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			TRAN, TRANG U	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/942,710	<b>Applicant(s)</b> KWON, IL GUN	
	<b>Examiner</b> Trang U. Tran	<b>Art Unit</b> 2614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Jan. 27, 2005 has been entered.

### ***Specification***

2. The substitute specification filed Jan. 27, 2005 has been entered.

### ***Response to Arguments***

3. Applicant's arguments filed Jan. 27, 2005 have been fully considered but they are not persuasive.

In re pages 22-26, applicant argues that neither Young nor Wachter discloses (1) "a controller that...produces a code conversion control signal" or (2) "a memory storing code conversion data" or (3) "a code converter converting the code into a code corresponding to the verified peripheral media device using the code conversion data stored in the memory by responding to the code conversion control signal," or (4) "the code converted outputting the converted code to the verified peripheral device through the communication port by responding to the output control signal."

In response, as discussed in the previous Office Action, the examiner respectfully disagrees. Young et al discloses in col. 5, lines 25-32 that

"The input-select-table generally corresponds to the ID set up for the current active mode. A device typically has an ID code for its particular type, make, and mode. Loading the ID code provides the remote with information to control that particular device. The ID code may correspond to a database having only the "available functions" to be controlled, or the exact signal parameters with must be sent to effectuate a proper response in the device."

It is noted that "conversion" can be defined as **to change from one form or function to another**. Thus, the alleged "code conversion" is met by the selecting of the signal parameters when loading ID code because the signal **parameters would be changed from one ID code to another ID code**. The claimed (1) "a controller that...produces a code conversion control signal" or (2) "a memory storing code conversion data" or (3) "a code converter converting the code into a code corresponding to the verified peripheral media device using the code conversion data stored in the memory by responding to the code conversion control signal," or (4) "the code converted outputting the converted code to the verified peripheral device through the communication port by responding to the output control signal" is disclosed in col. 5, lines 25-32 of Young.

In re pages 27-29, applicant argues that, even if these two references were properly combined they would not result in, or render obvious, the claimed invention because, in the first place, Young works well without the need to incorporate a communication port to be connected with the peripheral media devices though a communication line and does not generate any converted code to be outputted to a media peripheral device through the communication port, in the second place, Wachter's communication port is connected to a CPU which generates different signals to activate a plurality of RCEDs, whereas Young has only one remote 100, and has no

Art Unit: 2614

need to use a CPU to activate his one remote 100, and in the third place, the Office Action never states how the communication port added to Young would fit in with, and/or operate with Young's remote control that has no need for such a communication port or for a CPU that uses the communication port.

In response, the examiner respectfully disagrees. As discussed in the last Office Action, that applicant cannot show non-obviousness by attacking the references individually where, as here, the rejection is based on a combination of references. In *re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Wachter teaches the advantages of his invention from col. 2, line 15 to col. 3, line 37. One of ordinary skill in the art would have been motivated to combine the references as proposed by the examiner for the above advantages of Wachter. The motivations for combining references are taught from col. 2, line 15 to col. 3, line 37 of Wachter.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al. (US Patent No. 6,567,011 B1) in view of Wachter (US Patent No. 6,469,633 B1).

In considering claim 1, Young et al discloses all the claimed subject matter, note  
1) the claimed a remote controller producing a remote code for controlling for its own

use, a remote code for controlling peripheral media devices, and selection signals of external input sources in accordance with a user's selection is met by the remote control 1 (Figs. 1-4, col. 4, lines 24-56), 2) the claimed a receiver part receiving one of the remote codes from the remote controller is met by the receiver 20 (Fig. 1, col. 3, line 66 to col. 4, line 56), 3) the claimed a controller verifying that a present external input source corresponds to one of the peripheral media devices and produces a code conversion control signal and an output control signal is met by the receiver device 20 which configured to receive a selected input signal wherein the selected input signal from one of the input devices 30 and 40 (Fig. 1, col. 6, line 66 to col. 7, line 21), 4) the claimed memory storing code conversion data is met by the input-select-table which is loading the ID code provides the remote with information to control that particular device (Figs. 1 and 5, col. 5, line 25 to col. 8, line 8), and 5) the claimed code converter converting the code into a code corresponding to the verified peripheral media device using the code conversion data stored in the memory by responding to the code conversion control signal, the code converter outputting the converted code to the verified peripheral media device through the communication port by responding to the output control signal is met by the remote control 100 which is outputting the ID code verification state (col. 9, lines 3-40).

However, Young et al explicitly do not disclose the claimed a communication port to be connected with the peripheral media devices through a communication line.

Wachter teaches that the CPU 2 is coupled via serial cable 6 from the serial port of the CPU2 and the input of IR transceiver 7, the IR transceiver 7 had, in the prototype,

4 dual IR emitters, but in general must be capable of controlling a suitable number of IR emitters 8 selected according to the design of the overall system, and coupled to RCEs via IR cable 9 (Fig. 1, col. 4, lines 53-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the serial port as taught by Wachter into Young et al's system in order to provide a control system for controlling multiple electronic components via a single user-operated remote control device.

In considering claim 2, the claimed wherein the media device and peripheral media devices include TV receiver, DVD, video-cassette recorder, and a set-top box is met by the media system 10 (Figs. 1 and 8, col. 3, line 66 to col. 4, line 23 and col. 6, lines 5-22) of Young et al.

In considering claim 3, the claimed wherein the communication port is one of an RS232C, an 12C, and a parallel port is met by col. 6, lines 49-63 of Wachter.

In considering claim 4, the claimed wherein the media device further comprises a display part displaying a menu of the media device, a menu of the verified peripheral media device, and an operation status of the controller by responding to the code of the remote controller is met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34) of Wachter.

In considering claim 5, the claimed wherein the remote controller includes keys for selecting the external input sources corresponding to the peripheral media devices enabling the peripheral media devices to be connected to the media device is met by the remote control 1 (Figs. 1-4, col. 4, lines 24-56) of Young et al.

In considering claim 6, the claimed wherein the peripheral media devices includes communication ports identical to the communication port so as to establish communication channels with the media device is met by the serial port of the CPU 2 (Fig. 1, col. 4, lines 53-67 and col. 6, lines 49-63 of Wachter).

Claim 7 is rejected for the same reason as discussed in claim 1.

In considering claim 8, the claimed further comprising the step of displaying on a screen whether the media device and the peripheral media device corresponding to the present external input source mode are connected to each other is met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34 of Wachter).

In considering claim 9, the claimed further comprising the step of displaying character and video signals from the peripheral media device corresponding to the present external input source mode on a screen of the media device in accordance with the remote code is met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34 of Wachter).

In considering claim 10, the claimed further comprising the steps of: processing the code to operate the media device itself when the peripheral media device corresponding to the present external input source mode fails to be connected to the media device or the present external input source mode corresponds to the media device itself; and operating the media device in accordance with a command corresponding to the processed code is met by the customized default device ID code (col. 9, line 8 to col. 10, line 60 of Young et al).



In considering claim 11, the claimed wherein information of the code processed by the media device itself includes volume adjustment of the media device and change of the present external input source mode is met by the volume of the receiver 20 may be adjusted or the first means may also be used to alter the system mode to other desired modes (Fig. 1, col. 4, lines 35-56) of Young et al.

Claim 12 is rejected for the same reason as discussed in claim 2.

In considering claim 13, the claimed further comprising the steps of: executing a command corresponding to the converted code in the peripheral media device corresponding to the present external input source mode is met by the input-select-table which is loading the ID code provides the remote with information to control that particular device (Figs. 1 and 5, col. 5, line 25 to col. 8, line 8) of Young et al, 2) the claimed transferring an execution result from the peripheral media device corresponding to the present external input source mode to the media device is met by the remote control 100 which is outputting the ID code verification state (col. 9, lines 3-40) of Young et al, and 3) the claimed displaying an image according to the execution result on a screen and outputting a voice according to the execution result through a speaker of the media device is met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34) of Wachter.

In considering claim 14, the claimed further comprising the step of providing a communication channel set-on or set-off signal from the remote controller to the media device by a user's selection so as to turn on or off a mode for establishing communication channels between the media device and the peripheral media devices is

Art Unit: 2614

met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34 of Wachter).

In considering claim 15, the claimed wherein the communication channel set-on signal is provided when the peripheral media devices have the same communication ports of the media device on an on-screen display menu of the media device from the remote controller by a user and wherein the communication channel set-off signal is provided when the peripheral media devices fail to have the same communication ports of the media device on an on-screen display menu of the media device from the remote controller by a user is met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34 of Wachter).

Claim 16 is rejected for the same reason as discussed in claim 3.

In considering claim 17, Wachter discloses all the claimed subject matter, note 1) the claimed further comprising the steps of: monitoring whether a code to change the present external input source mode into a new external input source mode is produced from the remote controller is met by the user selects which task to perform by looking at the monitor 4 and manipulating a single remote control in one hand (Figs. 5-9, col. 5, line 38 to col. 7, line 34), and 2) the claimed relieving the established communication channel between the present external input source and the media device and establishing a new communication channel between the new external input source and the media device is met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34 of Wachter).

In considering claim 18, Young et al discloses all the claimed subject matter, note 1) the claimed storing, in the main media device, code conversion data corresponding to the main media device and the at least one peripheral media device is met by the input-select-table which is loading the ID code provides the remote with information to control that particular device (Figs. 1 and 5, col. 5, line 25 to col. 8, line 8), 2) the claimed inputting a control code to the indicative of an input source mode main media device, the control code corresponding to one of the at least one peripheral media device is met by the remote control 1 (Figs. 1-4, col. 4, lines 24-56), 3) the claimed verifying, in response to the input control code, an establishment of a communication channel via the exclusive communication line, the communication channel corresponding to the one of the at least one peripheral media device is met by the receiver device 20 which configured to receive a selected input signal wherein the selected input signal from one of the input devices 30 and 40 (Fig. 1, col. 6, line 66 to col. 7, line 21), 4) the claimed converting the input control code into a converted control code for controlling the one of the at least one peripheral media device is met by the remote control 100 which is outputting the ID code verification state (col. 9, lines 3-40), and 5) the claimed outputting, via the established communication channel, the converted control code to the one of the at least one peripheral media device, wherein the input control code is converted and output when the establishment of a communication channel corresponding to the one of the at least one peripheral media device is verified via the exclusive communication line and wherein the input control code is otherwise processed in the main media device is met by the receiver device 20 which configured to receive a

Art Unit: 2614

selected input signal wherein the selected input signal from one of the input devices 30 and 40 (Fig. 1, col. 6, line 66 to col. 7, line 21).

However, Young et al explicitly do not disclose the claimed a communication port to be connected with the peripheral media devices via an exclusive communication line.

Wachter teaches that the CPU 2 is coupled via serial cable 6 from the serial port of the CPU 2 and the input of IR transceiver 7, the IR transceiver 7 had, in the prototype, 4 dual IR emitters, but in general must be capable of controlling a suitable number of IR emitters 8 selected according to the design of the overall system, and coupled to RCEs via IR cable 9 (Fig. 1, col. 4, lines 53-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the serial port and the IR transceiver as taught by Wachter into Young et al's system in order to provide a control system for controlling multiple electronic components via a single user-operated remote control device. In considering claim 19, the claimed wherein the control code is input to the main media device via a remote controller.

In considering claim 19, the claimed wherein the control code is input to the main media device via a remote controller is met by the remote control 100 which is outputting the ID code verification state (col. 9, lines 3-40 of Young et al).

In considering claim 20, the claimed wherein the exclusive communication line is connected to the at least one peripheral media device at a communication port compatible with the at least one communication port of the main media device is met by

Art Unit: 2614

the serial port of the CPU 2 and the input of IR transceiver 7 (Fig. 1, col. 4, lines 53-67 of Wachter).

Claim 21 is rejected for the same reason as discussed in claim 3.

Claim 22 is rejected for the same reason as discussed in claim 4.

Claim 23 is rejected for the same reason as discussed in claim 4.

Claim 24 is rejected for the same reason as discussed in claim 4.

Claim 25 is rejected for the same reason as discussed in claim 8.

Claim 26 is rejected for the same reason as discussed in claim 9.

Claim 27 is rejected for the same reason as discussed in claim 9.

Claim 28 is rejected for the same reason as discussed in claim 9.

Claim 29 is rejected for the same reason as discussed in claim 10.

Claim 30 is rejected for the same reason as discussed in claim 10.

Claim 31 is rejected for the same reason as discussed in claim 11.

Claim 32 is rejected for the same reason as discussed in claim 2.

Claim 33 is rejected for the same reason as discussed in claim 2.

Claim 34 is rejected for the same reason as discussed in claim 13.

In considering claim 35, the claimed further comprising: generating on-screen data for inclusion with the controlled input source is met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34 of Wachter).

In considering claim 36, the claimed wherein the on-screen data is generated by the one of at least one peripheral media device according to the processed control code

is met by the graphical user interface (Figs. 5-9, col. 5, line 38 to col. 7, line 34 of Wachter).

Claim 37 is rejected for the same reason as discussed in claim 14.

Claim 38 is rejected for the same reason as discussed in claim 14.

Claim 39 is rejected for the same reason as discussed in claim 15.

Claim 40 is rejected for the same reason as discussed in claim 15.

Claim 41 is rejected for the same reason as discussed in claim 18 and further the claimed input means for inputting a control code to said main media device, the control code including one of a first code for controlling said main media device, a second code for controlling said at least one peripheral media device, and an input source selection signal for controlling an application of the first and second codes, the input control code controlling the input source to said main media device is met by the remote control 100 which is outputting the ID code verification state (col. 9, lines 3-40 of Young et al).

Claim 42 is rejected for the same reason as discussed in claim 19.

Claim 43 is rejected for the same reason as discussed in claim 18.

Claim 44 is rejected for the same reason as discussed in claim 2.

Claim 45 is rejected for the same reason as discussed in claim 2.

Claim 46 is rejected for the same reason as discussed in claim 20.

Claim 47 is rejected for the same reason as discussed in claim 3.

Claim 48 is rejected for the same reason as discussed in claim 28.

Claim 49 is rejected for the same reason as discussed in claim 13.

Claim 50 is rejected for the same reason as discussed in claim 13.

Claim 51 is rejected for the same reason as discussed in claim 4.

Claim 52 is rejected for the same reason as discussed in claim 8.

Claim 53 is rejected for the same reason as discussed in claims 18 and 41.

Claim 54 is rejected for the same reason as discussed in claim 19.

Claim 55 is rejected for the same reason as discussed in claim 2.

Claim 56 is rejected for the same reason as discussed in claim 2.

Claim 57 is rejected for the same reason as discussed in claims 4 and 8.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (703) 305-0090. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT  
April 17, 2005

